## Remarks/Arguments:

## I. Status Of The Claims

Claims 1-42 are currently pending in the application, each of which stand rejected in the outstanding Office Action. No amendments to these claims are made by the present Amendment. Thus, in the event the present claims are rejected, they will have been twice rejected and standing for an appeal established.

By the present amendment, Applicants are also adding new claims 43-47. No new matter has been added.

Also provided herewith are declarations submitted pursuant to 37 C.F.R. §1.132 of: Richard H. Repetto, Senior Equities Analyst, Sandler O'Neil; John Coulter, Vice President, Director of Marketing and Business Development, VhaYu Technologies, Inc.; and Robert M. Hegarty, Vice President, Securities and Investment Research, TowerGroup (collectively, the "Third Party Declaration"); and Eric LeGoff, Chief Operating Officer of Liquidnet, Inc. (the "LeGoff Declaration"). Applicants respectfully request entry and consideration of these Declarations.

Favorable reconsideration of the application is respectfully requested in light of the foregoing amendments and following remarks. This application has been granted special status pursuant to 37 C.F.R. § 1.102.

# II. Rejections Under 35 U.S.C. §103

Claims 1-42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Silverman et al. in view of Millard et al. Applicants respectfully submit that neither Silverman nor Millard, either alone or in combination, teaches or suggests the claimed invention.

While Silverman describes an order management system (OMS) and Millard describes non-binding indications to trade securities, the references fail to teach or suggest combining these aspects to arrive at the claimed invention, namely a system and method for interfacing with an order management system that includes:

deriving non-binding indications to trade securities from records reflecting orders for the securities in an OMS database, and automatically providing such indications to an Electronic Trading Marketplace (ETM).

As described in greater detail below, the claimed invention is not simply non-binding indication in the context of an order management system. Instead, the claims recite a particular relationship between the order management system and the indications, namely the indications are derived from records for orders in the order management system – a relationship neither taught nor suggested by the cited references, either alone or in combination.

#### A. The Independent Claims

Each of the independent claims 1, 9, 16, 23, 31 and 38 recite that the system/method of the present invention automatically provides non-binding indications, not firm orders, to the electronic trading marketplace (ETM). Each of the independent claims recite that the non-binding indications are derived from the records reflecting orders in the order management

system database. Thus, the claims reflect a conversion from firm orders to non-binding indications; from the proverbial "apples" to "oranges." As such, the claimed invention does not simply involve the combination of an order management system and non-binding indications to trade securities, but rather a specific relationship between records reflecting firm orders in an order management system database and non-binding indications. Furthermore, these non-binding indications are automatically provided to the ETM. As described in the specification, this means the non-binding indications are transmitted to the ETM "without manual trader intervention."

In this regard, independent claim 1 recites:

an interfacing module interfacing with an order management system (OMS) database and in communication with the ETM for reading data records in the OMS database reflecting orders for securities and for automatically providing non-binding indications to trade securities derived from the data records in the OMS database reflecting orders for securities to the ETM.

Similarly, independent claim 9 recites an ETM communications module for "automatically providing non-binding indications to trade securities derived from the data records reflecting orders for securities read from the OMS database."

Method claim 23 recites: "automatically providing non-binding indications to trade securities derived from the data records [in an OMS database reflecting orders for securities] to the electronic trading marketplace."

Even more explicitly, claim 38 recites the step of "deriving non-binding indications to trade securities from the data records [in the OMS database] reflecting orders for

securities" and "automatically providing the non-binding indications to trade securities to the ETM."

As discussed below, Applicants respectfully submit that Silverman and Millard, both alone and in combination, fail to teach or suggest this limitation as claimed.

B. The Claims Are Patentable Over the Combination of Silverman and Millard

Applicants respectfully submit that the combination of Silverman and Millard fails to teach or suggest deriving non-binding indications to trade securities based on records for orders in an order management system database, as claimed.

While Millard mentions non-binding indications, the combination of Silverman and Millard does not teach or suggest deriving non-binding indications from records reflecting orders in an Order Management System database. Nothing in either Silverman or Millard suggests deriving non-binding indications from records reflecting orders in an Order Management System database, and, as a completely separate point of distinction, neither suggests automatically providing these non-binding indications, or even orders, to an ETM.

1. <u>Millard Does Not Teach or Suggest Deriving Non-Binding Indications from Records Reflecting Orders in an OMS Database</u>

In rejecting the claims, the Examiner admits that "Silverman does not specifically disclose that orders are non-binding indications for the securities derived form [sic, from] OMS database records." OA at 3. The Examiner relies on Millard to cure the admitted deficiencies of Silverman. In relying on Millard, the Examiner (at page 3) states:

Millard discloses a non-binding indication at paragraph 334. Millard further discloses that an order management system facilitates automatic execution (Para.

Appl. Serial No. 09/834,171 Amendment dated December 7, 2004 Reply to Office Action of August 10, 2004

34, last six lines) of a firm offer (Para. 34, lines 4-6). The same system also facilitates non-binding indications to trade securities derived from OMS database orders (Para. 34, lines 6-12, Para. 35).

The Examiner has cited no other section of Millard to cure the admitted deficiencies of Silverman.<sup>1</sup> Each of the Examiner's statements and citations with regard to Millard will now be addressed to show that Millard fails to teach or suggest deriving non-binding indications as is required by the claimed invention.

First, ¶334 of Millard is cited as disclosing a non-binding indication. Applicants respectfully disagree. Paragraph 334 of Millard is reproduced below for ease of reference.

[334] The Trading Floor display preferably provides a facility for submitting an acceptance of one or more public or private postings. The functionality of this is similar to that described for the Activity Board, except that a Member may also use this feature to make a non-binding, private acceptance of the terms of another Member's public posting. The other Member would need to accept that private acceptance to conclude the negotiation

Paragraph 334 of Millard only describes a non-binding acceptance of another posting.

Nowhere in this paragraph (or anywhere in Millard) is it suggested to have a system that derives indications from records for orders in an order management system database.

The Examiner's citations to paragraphs 34 and 35 of Millard evidence a basic misunderstanding of an Electronic Commerce Network (ECN), which is an order matching system that receives and matches orders from multiple trading firms, as opposed to an order

At page 14 of the Office Action, the Examiner cites to paragraph 53 of Millard for relation to order management systems; however, paragraph 53 has no relevance, as it simply relates to the required pre-approval of securities by users.

management system, which is a system used at a single trader's firm for entry of records for orders of that particular trading firm. Declarations at paras. 4, 5.

Paragraphs 34 and 35 of Millard are reproduced below for ease of reference.

[0034] The Instinct system is described in U.S. Pat. No 3,573,747, issued on Apr. 6, 1971. The system includes a series of terminals, each accessible to a Member and a central computer. Each Member may submit for display a firm offer to buy or sell a given number of shares of a certain security at a stated price. The Member may also submit bids or offers of a security without price. This information, minus the submitter's identity, is displayed to all Members, in a price sequence. Any Member may respond to an offer through the negotiating option of a counteroffer and the system will allow private communications between the two Members until and if an agreed-upon price is reached. Alternatively, a Member may submit an acceptance of any offer displayed to all Members. In either option, the system executes orders when a buyer and seller have agreed upon a price. The parties to an executed trade deliver the shares of stock and purchase price to a designated bank for a conventional clearing operation. If a bid and an ask are submitted at the same price, the system will consummate the trade. Each order execution is triggered by an immediately previously submitted offer to buy or sell. Expressed otherwise, each order is immediately executed against a booked order itself booked. is or

[0035] In general, ECNs are centralized, computer-based order matching systems that display bids and offers of subscribers to the ECN and automatically match subscriber orders if bids match offers. Otherwise, the best prices are posted on NASDAQ to compete with market makers. ECNs therefore trade only in stocks for which there are significant numbers of closely matched bids and offers on a given security posted on the ECN. Such securities are termed "liquid"--they trade frequently (trade "flows" easily). ECNs can apply to be regulated as an exchange, or may be regulated as a broker-dealer operated alternative trading system ("ATS"). The only securities traded on ECNs are

Appl. Serial No. 09/834,171 Amendment dated December 7, 2004 Reply to Office Action of August 10, 2004

liquid, registered securities which trade in significant volumes and are listed on traditional exchanges or broker networks such as NASDAQ.

Turning to the specific citations, the Examiner cites to paragraph 34, last 6 lines, as disclosing that "an order management system facilitates automatic execution." This section of Millard, however, does not relate to an <u>individual</u> trading firm's order <u>management</u> system. Instead, it describes the Instinet system, which is an order <u>matching</u> system for matching firm orders (i.e., bids and asks at the same price) received from <u>multiple</u> trading firms. Instinet is not an order management system. Declarations at 6. In support of this distinction, paragraph 35 of Millard explicitly identifies ECNs as "order <u>matching</u> systems" and the specification of the present application describes an order management system as a computerized tool by traders to "record their orders to purchase or sell securities." Specification at para 3. Furthermore, the terms "ECN" and "order management system" are understood by those of ordinary skill in the art to have such independent and distinct meanings. Declarations at paras. 4-6.

The Examiner cites to paragraph 35 of Millard as teaching "non-binding indications to trade securities derived from OMS database orders." OA at 3. Similarly, in response to Applicants' prior argument that Millard fails to teach interaction with an OMS, the Examiner cites paragraph 35, lines 1-2, for support of the claimed order management system. OA at 13. However, paragraph 35 explicitly relates to ECNs, which are order <u>matching</u> systems, not order <u>management</u> systems. In this regard, paragraph 35 states:

In general, ECNs are centralized, computer-based <u>order matching</u> <u>systems</u> that display bids and offers of <u>subscribers to the ECN</u> and <u>automatically match subscriber orders</u> if bids match offers.

As such, paragraph 35 relates only to displaying and matching firm orders submitted by multiple firms. No order management system is discussed, and moreover, there is no suggestion to derive non-binding indications to trade securities from records for orders in an order management system database. As described in the specification (para. 3) and as is understood in the trading field, an order management system is used by a trader at a single firm to record that firm's orders to buy or sell securities, while an ECN is an order matching system for aggregating and matching orders received from multiple trading firms. See Declarations at 4, 5. Thus, contrary to the Office Action, Millard does not disclose non-binding indications to trade securities that are derived from order management system database orders.

Citing to paragraph 34, lines 6-12 and paragraph 35, the Examiner continues by stating that the "same system also facilitates non-binding indications to trade securities derived from order management system database orders." Nowhere in the cited portion, or anywhere, does Millard teach or suggest non-binding indications derived from order management system database records. Instead, the cited portion of paragraph 34 teaches away from deriving non-binding indications from an order management system database orders because it explicitly relates to members directly submitting non-binding indications, as opposed to the system reading existing records for orders in an order management system database and the system deriving non-binding indications from such records as required by the present invention. In short, Millard describes a member directly submitting an indication, which is not reading a record in an order management system database and deriving non-binding indications from such records. In sum, Applicants respectfully maintain that Millard fails to teach, suggest or render obvious deriving

non-binding indications from orders in an OMS database. Thus, Millard fails to cure the admitted deficiencies of Silverman.

2. <u>Millard Teaches Away from Deriving Non-Binding Indications from Records Reflecting Orders in an OMS Database</u>

As Applicants have previously stated, other sections of Millard teach away from deriving non-binding indications from records reflecting orders in an order management system database.

Millard requires a Member to manually enter the parameters of an indication. Millard is explicit in its teachings:

[0183] Add Listing

[0184] A Member desiring to post an indication of interest to acquire or transfer an ownership interest in this security completes standardized posting forms on the System to specify the Issuer, Security, Restrictions, and desired terms of the transaction.

Millard's only description is manually entering indications, which is antithetical to and unnecessary in the claimed invention because in the claimed invention records are read from an order management system database and non-binding indications are automatically derived from such records. Deriving the non-binding indications from records for orders in the order management system database as claimed is an improved, alternative to the manual entering of indications described in Millard; having a separate, standardized form for submitting indications, as is required in Millard, obviates the need for, and teaches away from, deriving indications from records for orders in an order management system database. Declarations at para. 7. This argument was previously presented but not addressed by the Examiner. Silverman, dealing with binding orders, does not even hint at deriving non-binding indications from records for binding orders.

Having erroneously concluded that Millard teaches or suggests non-binding indications derived from records reflecting orders in an order management system database, the Examiner argued the combination of Silverman and Millard rendered the claimed invention obvious:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Silverman by adding the feature of non-binding indications to trade derived from OMS database orders disclosed by Millard because this would have added functions of negotiation and trading flexibility to existing trading systems. See Millard at Abstract, Para. 75 and Para. 334, last three lines. Further, see Millard at Para. 66 regarding known OMSs and their compatibility with the method described at Para. 64-65. OA at 3.

As an initial response, Applicants note that the sections of Millard cited, namely the abstract and paragraphs 75 and 334, simply provide a generic description of the ability of the system of Millard to allow multiple parties to negotiate trades for securities; they do not cure the deficiencies noted above. As for reference to paragraph 66 as describing "known order management systems," the Examiner continues the mischaracterization of ECN order matching systems as order management systems. Paragraph 66 simply refers to ECNs and existing trading systems. While Millard purports to be integrated with such trading systems, there is no discussion of integration with a trader's order management system.

Accordingly, because neither Silverman nor Millard teaches or suggests deriving non-binding indications from records reflecting orders in an order management system database and automatically providing those non-binding indications to an ETM, Applicants respectfully submit that the claims are not rendered obvious and are in condition for allowance.

Purporting to combine the teachings of Silverman and Millard cannot cure the lack of teaching of deriving non-binding indications from records in an order management system database. Indeed, replacing the binding orders of Silverman with non-binding indications from Millard, as suggested by the Examiner, would (assuming, arguendo, that such combination is proper) simply result in a system having an order management system database of records for non-binding indications being read and the same non-binding indications being provided to the marketplace. Employing indications, as described in Millard, in the system of Silverman would result in a system for transmitting indications from the trader 120 (in Silverman), to the OMS 130, to the handheld server 113, and, finally, to the handheld computing devices 114-116 used by the brokers on the exchange trading floor. There would be no reading of order records from the OMS to "automatically provide[e] non-binding indications to trade securities derived from [such records]" (claims 1 and 9); no "processing data representative of non-binding indications of interest to trade securities, the indications derived from records reflecting orders for securities automatically read from an OMS database" (claim 16); no "automatically providing non-binding indications to trade securities derived from the data records to the electronic trading marketplace" (claim 23); and no "deriving non-binding indications to trade securities from the data records [in the OMS database] reflecting orders for securities" (claim 38). Replacing the orders in Silverman with non-binding indications of Millard would result in a system storing the proverbial "oranges" and providing those same "oranges" to the marketplace. The claimed relationship of non-binding indications derived from orders – of the proverbial "oranges" derived from "apples" – is neither taught nor suggested and can only be arrived at using hindsight reconstruction.

Accordingly, Applicants respectfully submit that Silverman and Millard, both alone and in combination, do not teach or suggest reading records in an order management system database reflecting orders for securities and deriving from the order management system database records non-binding indications to be provided to an ETM, as claimed. Indeed, the independent Third Party Declarations at paragraphs 7-9 support that the cited references fail to teach or suggest the claimed features. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejections of claims 1-42 under 35 U.S.C. 103.

## C. The Combination Of Silverman And Millard Is Improper

As a separate ground for traversing the rejection, Applicants further submit that combining the teachings of Silverman and Millard is improper, because such combination would have no utility and would be contrary to the teachings and stated purpose of Silverman. Thus, according to the Manual of Patent Examining Procedure, Section 2143.01 (The Proposed Modification Cannot Render the Prior Art Unsatisfactory for its Intended Purpose) and the cases cited therein, the proposed modification of Silverman in light of Millard as suggested by the Examiner is improper.

The combination of Silverman and Millard would result in brokers on the trading floor having indications, which would need to be negotiated. However, neither Silverman nor Millard provides a mechanism for the traders 120 to distinguish orders from indications or to identify to the brokers on the trading floor the parameters of which indications the trader 120 wants to negotiate. Also, there is no mechanism to allow the trader 120 to negotiate such indications. Presumably, the brokers would need to return to the respective traders 120 to obtain explicit

instructions in the form of an order because an indication is non-binding and cannot be executed without a further, affirmative action by the trader. Such procedure would be time consuming and inefficient. Thus, the proposed combination of Silverman and Millard would be inconsistent with the stated purpose of Silverman (see col. 2, lines 39-45) and would render the system of Silverman unsuitable for its purpose of efficiently trading securities on the exchange floor. See Declarations at para. 10. Moreover, the combination of Silverman and Millard proposed by the Examiner would result in a system incapable of effectuating trades as there is no mechanism for the trader to provide the necessary, affirmative action of accepting or rejecting an indication.

Declarations at para. 10. According to the Manual of Patent Examining Procedure, Section 2143.01 (The Proposed Modification Cannot Render the Prior Art Unsatisfactory for its Intended Purpose) and the cases cited therein, the proposed modification of Silverman in light of Millard is improper. For these additional reasons, Applicants respectfully submit that Silverman and Millard fail to render the claimed invention obvious.

In response to Applicants' argument that Silverman and Millard are improperly combined, the Examiner misconstrued the argument as being "negotiation is inherently incompatible with securities trading." OA at 15-16. In fact, as detailed above, Applicants' argument is that one skilled in the art would <u>not</u> modify Silverman based on Millard as argued by the Examiner because such combination would result in a system in which trading could not be conducted or would be so inefficient as to have no utility. Declarations at para. 10.

The Examiner also argues that Applicants' argument improperly relies on elements not in the claims. This response has no basis in law or acceptable procedure. Applicants are arguing

that Silverman is improperly combined with Millard because the combination lacks numerous features that would render it operable. Without these features, one of ordinary skill in the art would <u>not</u> have combined the teachings of the two references as proposed by the Examiner. Declarations at para. 10.

The Examiner further argues that Applicants' argument improperly focuses on Silverman's dedication to enhancing efficiency of order placement. OA at 16. This is only part of the argument. The Examiner further cites to two sentences of the Summary of the Invention as describing the "essence" of Silverman as "providing an order centric method and system for tracking orders implemented on a trading floor exchange [and for routing] orders to a booth and a floor broker." OA at 16. The teachings of Silverman, particularly those relied upon by the Examiner, are not altered by this generic "essence." As described above, these specific teachings of Silverman relied upon are incompatible with Millard as combined by the Examiner.

Even in light of this "essence," Silverman and Millard are improperly combined. The portion quoted by the Examiner highlights Silverman's focus on tracking orders with a system "implemented on a trading floor exchange" and "rout[ing] orders to a booth and floor broker". Exchange floors such as the New York Stock Exchange, for example, do not use non-binding indications, and one skilled in the art would not combine non-binding indications with a system like Silverman that is implemented on or relates to trade on a trading floor. Declarations at para.

#### D. Objective Evidence Of Non-Obviousness

#### 1. Commercial Success

In addition, Applicants respectfully submit that the system provided by Liquidnet, Inc., assignee of the present invention, and covered by at least independent claims 1, 9, 16, 23, 31, 38 and 43-45, achieved immediate and sustained commercial success. For this reason, and as set forth in detail below and as supported by the LeGoff Declaration, as well as the Third Party Declarations, filed concurrently herewith, Applicants further respectfully submit that the claimed invention is non-obvious.

To overcome an obviousness rejection, an applicant may submit objective evidence of commercial success. See, e.g., In re Ben Huang, 100 F.3d 135, 139, 40 USPQ2d 1685 (Fed. Cir. 1996), citing Graham v. John Deere Co., 338 U.S. at 17-18, 148 USPQ at 467 (1966); and MPEP §716.03 and §716.04.

The immediate and sustained commercial success of the Liquidnet system is evident by the objective growth in business of the Liquidnet system. As set forth in the LeGoff Declaration, paragraph 4, "Liquidnet's [average daily volume] average growth rate has been nearly 20% quarter-over-quarter" and "even more accelerated in the present year, with an average growth rate of 27% quarter-over-quarter." "Total assets represented by Liquidnet U.S.-based Member firms are nearly \$4.8 trillion[, which] represents more than 68% of the total assets invested by in the United States." LeGoff Declaration, para. 5.

Furthermore, objective, third party news sources characterize the growth of the Liquidnet system as "spectacular," including 185 foreign and domestic member firms, which collectively manage about \$6 trillion in equity assets. Third Party Declarations, para. 11, Exhibit 1. In an

Appl. Serial No. 09/834,171 Amendment dated December 7, 2004 Reply to Office Action of August 10, 2004

environment where approximately nine out of every ten alternative trading systems fail, Liquidnet's growth is noteworthy. <u>See</u> Third Party Declarations, para. 12, Exhibit 2.

An applicant who is asserting commercial success to support its contention of nonobviousness bears the burden of proof of establishing a nexus between the claimed invention and evidence of commercial success. The term "nexus" designates a factually and legally sufficient connection between the evidence of commercial success and the claimed invention so that the evidence is of probative value in the determination of non-obviousness. See, e.g., MPEP §716.03 and Demaco Corp. v. F. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 7 USPQ2d 1222 (Fed. Cir. 1988). Similarly, evidence of non-obviousness including commercial success, such as that provided by Applicants by way of the Third Party Declarations and Exhibits thereto must be commensurate in scope with the claims. See, e.g., MPEP §716.03 and In re Tiffin, 448 F.2d 791, 171 USPQ 294 (CCPA 1971). In order to be commensurate is scope with the claims, the commercial success must be due to claimed features, and not due to unclaimed features. See, e.g., MPEP §716.03 and Joy Technologies Inc. v. Manbeck, 751 F. Supp. 225, 229, 17 USPO2d 1257, 1260 (D.D.C. 1990), aff'd, 959 F.2d 226, 228, 22 USPQ2d 1153, 1156 (Fed. Cir. 1992). Applicants respectfully submit that such a factually and legally sufficient connection or nexus exists between the claimed invention and the commercial success of the system embodying the claims. Applicants further respectfully submit that such a nexus is clearly demonstrated by the Declarations of Third Party, submitted concurrently herewith.

As an initial matter, it is important to note that Messrs. Hegarty, Coulter and Repetto, who have provided the declarations cited herein, are not related to or in any way affiliated with

Liquidnet. The Declarants, other than Mr. LeGoff, Chief Operating Officer of Liquidnet, are independent third parties that are neither employees, owners nor long-term customers of Liquidnet.

As recited in the Third Party Declarations at paragraphs 15-19, and as shown in Exhibits 1-4, the commercial success was (and is) due to reading records from the OMS database, deriving non-binding indications from the records and providing the non-binding indications to the ETM, but not to other features or "bells and whistles" of the system.

The commercial success of the Liquidnet system is derived from the claimed features, namely reading records reflecting orders in OMS databases, deriving non-binding indications based on such records, and automatically providing the non-binding indications to an electronic marketplace. There is a nexus between the commercial success of the system and the claim limitations. The independent, Third Party Declarations support this, as do the independent news articles attached as Exhibits to the Declarations. For example, "Leveraging the Napster Model: Peer-to-Peer Computing Penetrates the Buy Side", TowerGroup, November 2000 (Exhibit 4) provides:

Lastly, Liquidnet has developed a system that interfaces directly to a firm's order management system, eliminating the need for extra keystrokes on the part of the buy-side trader, a characteristic whose importance cannot be overstated. Page 10.

In contrast, objective articles and third parties have ruled out the commercial success stemming from other, non-claimed features. In this regard, Exhibit 5, "Crossing Networks – Has their time come," Banking Technology, May 31, 2002, emphasizes that use of the claimed features to generate liquidity is the driver for success, not other, non-claimed features:

'With crossing networks [such as Liquidnet], the key is liquidity. Everything else is secondary. If they don't amass liquidity, they won't survive no matter how many bells and whistles they have,' says Rob Hegarty, Senior Analyst at TowerGroup.

See Third Party Declarations, para. 19.

Accordingly, Applicants respectfully submit that the independent Third Party

Declarations and Exhibits thereto provide the necessary legal and factual nexus between the claimed invention (as recited by at least the independent claims) and the commercial success of the Liquidnet system, which, as stated above, is covered by at least the independent claims.

## 2. Copying By Others

A showing that a competitor copied the claimed invention, particularly after having failed to develop its own solution, is another objective indicia of non-obviousness. See, e.g., Panduit Corp. v. American Cyanamid Co., 837 F.2d 469 (Fed. Cir. 1987). With regard to the present application, a competitor to the assignee of the present application copied the invention of at least independent claims 1, 9, 16, 23, 31, 38 and 42-45 after its own system proved to be less successful than the claimed invention.

As described below and as set forth in the Third Party Declarations, Harborside+, a competitor of Liquidnet, copied the Liquidnet system and, more particularly, copied the claimed features of reading records reflecting orders in OMS databases and deriving non-binding indications of interest, which are automatically provided to a marketplace. This copying is evidenced by a comparison of two articles: Exhibit 5 to the Third Party Declarations, "New

Block Trading System Combines Automation with the Human Touch, Wall Street and Technology, September 4, 2002, and Exhibit 6 to the Third Party Declarations, "Buy-Side Firms Tapping Liquidity Via OMS Interfaces with Harborside+," December 16, 2002 Harborside+ press release.

As described in the earlier article, Exhibit 5, Harborside+ clients "enter[ed] indications of interest [IOIs] to buy or sell a stock" (third paragraph) and "traders use[d] the system by entering IOIs." (seventh paragraph). Thus, in the original system offered by Harborside+, traders manually entered the non-binding indications of interest into the system.

However, as evidenced by the later article (Exhibit 6), Harborside+ redesigned its system after it had already developed it and after Liquidnet made its system embodying the independent claims public, adding an interface to traders' OMSs to add increased liquidity.

Harborside announced [on December 16, 2002] that traders are gaining access to new sources of liquidity, by leveraging interfaces between its large block trading service and their respective order management systems (OMS). Exhibit 6 to Third Party Declarations, first paragraph.

Thus, in contrast to the original Harborside+ system, the redesigned system, like the claimed invention, "seamlessly allows Harborside+ to receive [non-binding indications of interest] IOIs from a traders' [sic] OMS." Exhibit 6 to Third Party Declarations, third paragraph. In sum, Harborside+ copied the claimed features from Liquidnet.

Harborside+'s copying is not surprising to those skilled in the art. See Third Party

Declarations at para. 22. First, Liquidnet and Harborside+ are (and were at the time of copying)

competitors in the market for large block trades. As acknowledged in the industry, around the time Harborside+ copied the Liquidnet system, Liquidnet was the only main competitor to Harborside+. Exhibit 7 to Third Party Declarations, "Harborside+ Rolls Out Block Trading Platform," eFinancialNews, September 23, 2002 (last paragraph).

Second, around the time of copying by Harborside+, the commercial success of the Liquidnet system was well known and significant. As set forth in the LeGoff Declaration at paragraph 5, such success of the Liquidnet system was publicly known.

Third, the claimed features were the cause of the commercial success of the Liquidnet system (see above) and were the features most important to Harborside+'s customers. For example, one Harborside+ customer described the interface with the OMS for reading OMS records and deriving non-binding indications of interest as "innovative, seamless to clients and easy to use which is important to traders" (Exhibit 6 to Third Party Declarations, eighth paragraph), while another customer noted that "having Harborside+ run off [its] OMS makes the application easy to use." Exhibit 6, seventh paragraph. Indeed, the increased liquidity resulting from reading records in OMSs and deriving non-binding indications, which are provided to an ETM, was deemed an important feature by the industry, as the Harborside+ redesigned system was touted as adding "new sources of liquidity, by leveraging interfaces between its large block trading service and their respective order management systems (OMS)." Exhibit 6 to Third Party Declarations, first paragraph.

Accordingly, Applicants respectfully submit that the invention recited in at least the independent claims was copied by a competitor after that competitor attempted to provide its

own large block trading system and that such copying is evidence of the non-obviousness of the claimed invention.

## E. The Dependent Claims Are Further Patentable Over The Cited References

Applicants respectfully submit that the dependent claims are further distinguishable over the art of record. By way of example only, several claims are directed to two-way communication between the ETM and OMS. In this regard, claim 2 is directed to an interfacing module that "is further adapted to create data records in the OMS database responsive to execution information indicating trades of securities sent by the ETM." Thus, there is a two-way flow of information between the OMS and ETM: 1) indications derived from OMS database records provided to the ETM; and 2) the ETM providing execution information to an interfacing module, which creates data records in the OMS database.

In meeting this limitation, the Office Action relies upon the "Execution Entry" item in the table at columns 11 and 12 of Silverman. However, such execution entry merely states that an execution record is created in the executions database of the handheld units 114-116. When reading Silverman on claim 1, the Office Action considered the handheld units 114-116 to be the ETM. OA at 3. Thus, this section of Silverman is directed to ETM records and fails to teach creating data records in the OMS database.

The execution entry of Silverman also references "retrieve order-execute from outbound queue and send to HHS 113." This notation simply suggests that a message is sent to the handheld server 113. When applying Silverman to the independent claims, the Office Action considered the handheld server 113 to be the interfacing module. OA at 2. Thus, the "Execution

Entry" item only suggests information being sent to the interfacing module, not to the OMS and not to create records in the OMS, as recited in claim 2.

The Examiner argues that this is an "arbitrary wall between the functions of the ETM, interfacing module and OMS". OA at 18. The distinction between these components is not arbitrary as they are distinct components with distinct functions and purposes: the ETM is the marketplace in which indications from multiple firms are aggregated and the OMS is the order management system at an individual trading firm used for recording that firm's orders. In the context of claim 2, providing a record at the ETM is not the same as providing the record at the OMS. Indeed, it is the Examiner that is arbitrary, reading the references on the claims one way for some limitations and in a different, inconsistent way for other limitations.

The Office Action also cites Millard paragraphs 218-222 as meeting the limitations of claim 2; however, these paragraphs simply suggest that records of executed, or concluded, trades are available to members for review. The paragraphs do not suggest an interfacing module between the ETM and OMS to create data records in the OMS database based on the ETM.

Accordingly, the cited references, both alone and in combination, fail to anticipate or render obvious claim 2 and the claims depending therefrom.

Similar to claim 2, claim 10 recites that the interaction module "is further adapted to create data records in the OMS database responsive to receive execution information indicating trades of securities executed at the ETM." Claim 10 includes communication both from the OMS to the ETM (i.e., indications to the ETM) and from the ETM to the OMS (i.e., creation of records in the OMS database responsive to execution information from the ETM). In meeting

this limitation, the Office Action continues to cite to the "bi-directional arrows among elements at Figure 1" of Silverman. However, as previously pointed out, the only bi-directional arrow is between the wireless network to the handheld units 114-116 and the handheld server 113.

Because the Office Action considered the handheld units 114-116 to be the ETM and considered the handheld server 113 to be the interfacing module, this bi-directional arrow is between the ETM and the interfacing module. OA at 4. In contrast, claim 10 requires two-way communication with the OMS. Because there is no discussion of two-way communication with the order management system 130 of Silverman and no discussion of the creation of records in the OMS of Silverman based on the ETM, claim 10 is further distinguishable from the cited references.

As support for the statement that "it would have been obvious to provide such bidirectional communication to keep the ETM and OMS databases synchronized with respect to trading data," the Examiner argues that the claims merely recite database synchronization.

Applicants disagree. As admitted by the Examiner, synchronization is "version comparison of copies of the [database] files to ensure that they contain the same data." OA at 19. This relates to copies of the same database and, as such, has no relevance to the claimed invention because the ETM and the OMS are not copies of the same database. Synchronization is necessary when two copies of a database are being used, for example, due to scaling for multiple users, and a change to one must be reflected in the other because the two are meant to be copies of the same database. The Examiner's cited definition explicitly reflects this point by reciting "version comparisons of copies." The ETM and OMS are not copies of the same database; the ETM is a

market reflecting indications derived from records for orders in multiple order management systems, whereas each order management system contains records reflecting orders.

The Examiner's citation to Buist is equally misplaced, as Buist is directed to a system of "replicated servers supporting replicated databases." Abstract. The cited portion of Buist (col. 10, lines 7-25) confirms that, as with the definition cited by the Examiner, synchronization ensures multiple versions or copies of the same database are identical. In Buist, a master database is updated with a new order and the system propagates that order "to the replica servers 30 which update their replica databases to reflect this [order]." Col. 10, lines 11-16. The databases are replicas, or exact copies, of the master database. See, e.g., Merriam-Webster's Online Dictionary, 10th Edition (available at http://www.m-w.com/cgibin/dictionary?book=Dictionary&va=replica). Therefore, by definition, the databases must be synchronized. In contrast, the ETM and the OMS are not replicas or copies of the each other, as the ETM reflects non-binding indications and the OMS includes records reflecting orders.

With the present invention, the need for updating the OMS stems, in part, from the ability (but not the requirement) of the OMS to be used in connection with markets external to the ETM. The present invention contemplates the OMS being used by traders to place binding orders in other markets. Thus, the OMS must be kept current, reflecting executions through the ETM, so that only unfilled orders remain in the OMS and are sent to such other markets. In contrast, the order management system 130 of Silverman is coupled to a single market (i.e., the handheld devices 114-116) and is not subject to transactions on external markets. Therefore, Silverman

does not have the same need to monitor the handheld devices and update its order management system 130.

In response to this argument, the Examiner points to paragraph 14 of Millard as disclosing that trading occurs in multiple markets and the system presents a unified marketplace of all offers for securities of a given issuer. OA at 20. This unified view is simply an aggregation of the offers and is unrelated to creating a record in an order management system based on execution information from a marketplace, as claimed.

Applicants respectfully submit that claims 24, 32 and 39 also recite, to varying degrees, communication with the OMS, namely the creation of records in the OMS in response to the ETM and, as such, are allowable for at least the reasons noted above.

In addition to claims related to creating records in the OMS, certain dependent claims directed to two-way communication between the OMS and ETM relate to updating the ETM. For example, claim 14 recites "a module for determining whether the data records in the OMS database ... are changed," "a module for determining whether the changed data records should be provided to the ETM" and "a module ... to provide order information corresponding to the changed data records to the ETM." Thus, the claimed interfacing module is able to reflect in the ETM changes in the OMS. Because a trading firm uses its OMS to place orders in markets other than the ETM, the records in the OMS will change. Once the OMS record changes, the indication on the ETM can be correspondingly changed.

In meeting the limitations of claim 14, the Office Action cites to Silverman, col. 4, lines 29-41. Applicants respectfully submit that Silverman fails to teach or suggest the claimed

subject matter. The cited section of Silverman merely describes a booth clerk allocating order executions with the updated "leaves" (i.e., remaining order or portion of order to be filled) being sent to the handheld devices 114-116. As such, the information sent to the handheld devices 114-116, which are considered by the Office Action to read on the ETM, is merely the manual allocations <u>made by booth clerks</u> and is not based on <u>changes to OMS records</u>, as recited in the claim. Column 6, lines 19-24 makes clear that no information is sent based on changes to the OMS.

Allocations performed by the clerk are in turn transmitted to the HHS 113 and logged. The allocations are also transmitted from the HHS 113 to the floor broker via a handheld 114-116 computing device 114-116.

The OMS is not reviewed for changes; it is not even mentioned.

That Silverman fails to disclose updating ETM records based on changes to the OMS is understandable. While embodiments of the present invention contemplate the trader's OMS being used to execute trades on markets other than the ETM, the order management system 130 of Silverman is not coupled to a market other than the handheld devices 114-116. Thus, while records in the OMS being used with the present invention may change based on external transactions, the order management system 130 of Silverman is not subject to external transactions and therefore does not have the same need to monitor the order management system and update its orders.

Accordingly, Applicants respectfully submit that claim 14, and the claims depending therefrom, are further distinguishable over cited references. Furthermore, claims 29, 36 and 42 similarly recite limitations directed to updating indications at the ETM based on changes to the

OMS records. As such, Applicants respectfully submit that claims 29, 36 and 42, and the claims depending therefrom, are similarly distinguishable over the cited references.

Accordingly, Applicants respectfully submit that the claims, as currently pending, are not rendered obvious by the art of record and are in condition for allowance.

# F. Additional Comments Regarding The Examiner's Response to Previous Arguments

Most of the Examiner's comments with respect to the previous arguments presented by Applicants have been addressed in the body of this response. We respond separately to certain of the comments.

With all due respect to the Examiner, the undersigned attorney fully understands and appreciates the difference between a rejection made under 35 U.S.C. § 102 and a rejection made under 35 U.S.C. § 103. It is axiomatic that if neither reference taken alone teaches or suggests a particular limitation (e.g., deriving indications from the OMS database), then the combination of those two references also cannot teach or suggest that limitation. Nonetheless, in responding to the 35 U.S.C. § 103 rejections, Applicants have explained, in detail, how each of the cited references, both alone and in combination, failed to teach, suggest, or render obvious the claimed invention.

Applicants have diligently, and in good faith, attempted to advance prosecution of this case, which has now included two requests for continued prosecution and two personal interviews, one of which was with the Examiner and his supervisor. The Examiner's piecemeal response to the applicant's previous arguments as set forth on pages 6-22 of the August 10, 2004

Office Action are, with all due respect, both unwarranted and unhelpful in advancing prosecution of the subject application. For example, the Examiner's statement on Page 6 of the Office Action that "applicants argue that a reference does not disclose a limitation for which the Examiner actually relied on the other reference cited" fails to take into account the fact that Applicants have, in the totality, argued that each reference fails to teach the limitation noted by the Examiner. Specifically, the Applicants have, in detail, explained how both Silverman and Millard fail to teach or suggest deriving non-binding indications from orders in an order management database.

On Page 7 of Office Action, the Examiner acknowledges that the motivation to combine the two cited references must be found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. The Examiner has cited to the abstract, Paragraph 75 and Paragraph 334 of Millard as providing the motivation to combine the two references. Applicants have responded, in detail, as to why the cited sections of Millard failed to provide the motivation alleged by the Examiner. In addition, Applicants have herewith submitted a Declaration by one of skill in the art explaining why the combination is improper.

The Examiner's piecemeal approach to responding to Applicants' arguments is also evident on Page 11 of the Office Action. For example, the examiner states that "applicants fail to address the citation of Millard at Paragraphs 185 and 188 as cited above and in the prior Office Action for the limitation of reading orders in the database. The examiner understands applicant's silence on the citation from Millard to be an agreement that discloses the limitation."

This statement from the Examiner simply ignores the extensive arguments Applicants put forth

on page 21 of the previous response in which paragraphs 185 and 188 of Millard were discussed and distinguished. In fact, the Examiner acknowledges applicant's arguments with respect to these sections of Millard at Page 14 of the Office Action. In any event, Applicants have not been silent on this section of Millard and there is absolutely no agreement that this section discloses the limitations the Examiner alleges to be present.

Page 13 of the Office Action in response to applicant's arguments that Millard taught away from nonbinding indications derived from OMS records, the examiner stated that applicant had made an assertion without explanation or supporting argument. Applicants respectively maintain that the explanation and supporting argument was present in the very next paragraph of our response, which the Examiner appears to have failed to appreciate.

On Page 17 of the Office Action, the Examiner argues that there is no information flow from the OMS to the ETM recited in Claim 2 of the present application. Applicants respectfully disagree. As noted, in our arguments, Claim 2 is directed to an interfacing module that is "further adapted to create data records in the owner's database responsive to execution information indicating trades of securities sent by the ETM." While the Examiner is correct in that Claim 2 does explicitly recite the flow of information form the ETM to OMS, Applicants respectfully point out that Claim 2 depends from Claim 1 and that Claim 1 specifically recites the flow of information from the OMS to the EMT, thus Claim 2 is directed towards two-way communication between the ETM and the OMS as applicants had previously argued.

On Page 18 of the Office Action, the Examiner states that Applicants' arguments have set up "an arbitrary wall" between the functions of the ETM, interfacing module and OMS.

Applicants respectfully disagree, as they are giving effect to the claim language. As pointed out

above, it is the Examiner that arbitrarily reads the reference on the independent claim one way,

and another, inconsistent way, for a dependent claim.

G. New Claims 43-47 Are Patentable

Applicants respectfully submit that new claims 43-47 are similarly patentable over the art

of record. As with the pending independent claims, each of the new claims recites non-binding

indications derived from records for orders in an OMS database and therefore, are patentable for

at least the reasons noted above.

Furthermore, each of the new claims recites that the OMS is used by a trading firm to

records reflecting orders, as opposed to an ECN, which the Examiner had read on the OMS

recited in the claims previously presented. Accordingly, Applicants respectfully submit that the

OMS is explicitly defined within the claim such that it is improper to read the discussion of

ECNs or other trading systems of Millard on the OMS as done in the outstanding Office Action.

Each of new claims 43 and 44 also explicitly recite that each of two trading firms have a

separate OMS and the ETM receives non-binding indications derived from the OMS records of

the multiple trading firms. Thus, the ETM includes "liquidity for securities in the form of the

non-binding indications of the first and second trading firms." Claim 44.

Claim 44 further recites that the non-binding indications are provided to the ETM without

manual action by any trader at a trading firm. In contrast, the cited references describe a user

initiating trades. See, e.g., Silverman, Col 4, lines 12-14. ("a trader, customer or other person

with access to the Order Management System 130 initiates a trade by entering an order 210").

45

Lastly, claim 45 further recites a method for facilitating security transactions on multiple markets, namely a traditional market with binding orders, such as the New York Stock Exchange, and an alternative market with non-binding indications, such as the ETM provided by the assignee of the present application. In this regard the claim explicitly recites the relationship of trading firms' existing OMSs and the present invention. The invention can sit behind a trading firm's existing OMS and, while the trading firm uses the OMS to provide binding orders to traditional markets, the system can also provide non-binding indications based on those same records to an ETM. In this regard the claim recites:

creating records reflecting orders for securities in an order management system (OMS) database;

initiating transmission of a binding order to a marketplace of binding orders, the order based on a record in the OMS database;

initiating reading multiple records in the OMS database, deriving non-binding indications from the multiple records reflecting orders in the OMS database and providing the non-binding indications to an electronic marketplace different than the marketplace.

Claim 46, which depends from claim 45, recites that providing the binding order to the marketplace is manual, while providing the non-binding indications to the ETM is automatic, without manual intervention. None of the cited references, either alone or in combination, teaches or suggests automatically providing non-binding indications to an ETM based on records in an OMS, while also manually providing binding indications to a different marketplace based on the same records in an OMS.

Dependent claim 47 is further directed to the effect of execution of the binding order in the market on the non-binding indications in the ETM. Specifically,

Appl. Serial No. 09/834,171 Amendment dated December 7, 2004 Reply to Office Action of August 10, 2004

the record in the OMS database [is] modified based on execution of the binding order in the marketplace [and the] modification based on execution of the binding order is reflected in a non-binding indication in the ETM.

Accordingly, Applicants respectfully submit that new claims 43-47 are neither anticipated nor render obvious by the art of record and are also in condition for allowance.

### Conclusion:

Applicants thus believe that the claims in the present application are in condition for allowance. Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and remarks. If the Examiner has any questions or suggestions regarding this response or the application, he is invited to contact the undersigned at the telephone number provided below.

If any extension of time is required to have this paper entered and considered, such extension is hereby petitioned. Any additional fees or charges necessary in connection with the present application are hereby authorized to be charged to Deposit Account No. 19-4709.

Respectfully submitted,

Ian G. DiBernardo

Registration No. 40,991

Attorney For Applicants

Stroock & Stroock & Lavan LLP

180 Maiden Lane

New York, New York 10038-4982

(212) 806-5867